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## SYSTEM AND METHOD FOR STIMULATION OF A PERSON'S BRAIN STEM

## **ABSTRACT**

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According to one embodiment, a neurological stimulation system is adapted for implantation into a person's body for electrical, chemical, or combined electrical and chemical stimulation of target nerve tissue in the person's brain stem. For electrical stimulation, the system includes an electrical stimulation lead adapted for implantation on, in, or near the brain stem, and including electrodes adapted to be positioned on, in, or near target nerve tissue in the brain stem, for delivering electrical stimulation energy to the target nerve tissue. For chemical stimulation, the system includes an infusion catheter adapted for implantation on, in, or near the brain stem, and including openings adapted to be positioned on, in, or near target nerve tissue in the brain stem, for delivering a chemical to the target nerve tissue. The system also includes a stimulation source adapted for implantation in the person's body and operable to generate pulses of electrical stimulation energy or pulses of the chemical, for delivery to the target nerve tissue in the brain stem.